

## Reactor and process for preparing chlorine from HCl

### Abstract

The invention relates to a reactor and a process for preparing chlorine from hydrogen chloride by gas-phase oxidation by means of oxygen in the presence of a heterogeneous catalyst in a fluidized bed, with gas-permeable plates being located in the fluidized bed. The gas-permeable plates are connected in a thermally conductive manner to a heat exchanger located in the fluidized bed.

(Figure 1)